

REMARKS

Claims 1-28 are pending in the present application.

I. PATENTABLE SUBJECT MATTER: CLAIMS 3, 4 AND 13

Applicant gratefully acknowledges that claims 3, 4 and 13 recite patentable subject matter. However, it is believed that claims 3, 4 and 13 are in condition for allowance in view of the remarks herein.

II. "SIMILAR SCOPE" REJECTIONS

A. Claim 7

Claim 7 was rejected "on the same ground as for claim 1 because of similar scope". Applicant respectfully submits that this is not a proper ground for rejection in view of the recited subject matter of claim 7. Claim 7 does not have a similar scope, but, in fact, recites additional elements including: "computing a DC offset estimate; wherein the accumulation of the first sample sum, the second sample sum, and the third sample sum accounts for the computed DC offset estimate". These additional elements change the scope of the claim 7 with respect to the recited elements as set forth in claim 1.

It is respectfully requested that the Examiner provide a proper ground for rejecting the subject matter as set forth in claim 7 if the rejection is to be maintained.

B. Claim 26

Claim 12 was rejected "on the same ground as for claim 12 because of similar scope". Applicant respectfully submit that this is not a proper ground for rejection in view of the recited subject matter of claims 12 and 26.

Claim 26 recites "a receiver module; an analog-to-digital converter connected with the receiver module; a DC tracking loop connected to the analog-to-digital converter; and a multi-

hypothesis bit synchronizer (MHBS) connected to the DC tracking loop”.

On the other hand, claim 12 recites “a DC offset compensator; a plurality of sample accumulators, each of the plurality of sample accumulators being coupled with the DC offset compensator; and a maximum identifier coupled with each of the plurality of sample accumulators; wherein the maximum identifier is configured to identify the maximum output of the plurality of sample accumulators and cause an output to be generated according to the identified maximum output”.

With so many different elements recited in claims 12 and 26, how can the Examiner possibly claim the rejection is maintained because the claims have “similar scope”?

Perhaps that is why the Examiner added that “the receiver in figure 1 of Dutkiewicz et al. invention shows an A/D converter 21, a DC tracking stage 23 connected to the A/D converter 21”. However, such a statement falls short of presenting a *prima facie* case of obviousness.

Applicant respectfully submits that “[t]he examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness”. M.P.E.P. § 2142.

It is respectfully requested that the Examiner provide a proper ground for rejecting the subject matter as set forth in claim 26 if the rejection is to be maintained.

III. MISAPPLICATION OF THE INHERENCY DOCTRINE

Applicant respectfully notes that the Examiner has on occasion employed the inherency doctrine in support of a rejection. Applicant believes that the inherency doctrine has been misapplied in those instances.

Applicant would like to respectfully draw the attention of the Examiner to the following with respect to the doctrine of inherency.

A patent law treatise by Donald S. Chisum states that “Federal Circuit decisions emphasize that an anticipatory inherent feature or result must be consistent, necessary, and inevitable, not merely possible.” Chisum on Patents § 3.03[2][b] (December 2004).

The United States Court of Appeals for the Federal Circuit (“the Federal Circuit”) has stated that “anticipation by inherent disclosure is appropriate only when the reference discloses prior art that must necessarily include the unstated limitation”. Transclean Corp. v. Bridgewood Services, Inc, 290 F.3d 1364, 1373, 62 U.S.P.Q. 2d 1865 (Fed. Cir. 2002).

The Federal Circuit has also stated that “[i]nherency does not embrace probabilities or possibilities” and that “[i]nherent anticipation requires that the missing descriptive material is ‘**necessarily present, not merely probably or possibly present**, in the prior art.” Trintec Indus., Inc. v. Top-U.S.A. Corp, 295 F.3d 1292, 1297, 63 U.S.P.Q. 2d 1597 (Fed. Cir. 2002) (bold added).

Applicant respectfully submits that if the elements as set forth in the claims including the relationships recited therein are merely probable or possibly present, but are not necessary always present, then the inherency doctrine should not apply.

Claim 27

Claim 27 recites “an initial estimation module disposed intermediate the analog-to-digital converter and the DC tracking loop”.

The Examiner alleges that “a DC offset removal 22 is disposed intermediate the A/D converter 21 and the DC tracking stage 23. The DC offset removal 22 **inherently** performs initial estimation subtraction”. Office Action at page 12 (emphasis added).

As discussed above, the inherency doctrine states it is not enough that the DC offset removal 22 *probably or possibly* performs initial estimation subtraction, but that inherency doctrine requires that the initial estimation module is ***necessarily present*** in the DC offset removal 22 as alleged by the Examiner.

Applicant respectfully submits that “an initial estimation module” as set forth in claim 27 is not necessarily present in the cited DC offset removal 22. In fact, the DC offset removal 22

need not estimate at all. Accordingly, it can only be alleged that an initial estimation module can possibly or probably be present in the cited DC offset removal 22. Thus, the Examiner's allegation falls short of the appropriate applicability of the inherency doctrine.

For at least the above reasons, it is respectfully requested that the rejection be withdrawn with respect to claim 27.

IV. CLAIM 16

Claims 16 stands rejected under Chen in view of Dutkiewicz. Applicant respectfully traverses the rejection as set forth below.

Claim 16 depends from claim 12, thus the arguments made with respect to claim 12 below are also made with respect to claim 16.

Claim 16 recites "wherein the electronic device is a personal digital assistant". The Examiner admits that neither Chen nor Dutkiewicz teaches a persona digital assistant including the elements as set forth in claim 12.

A. M.P.E.P. § 2144.03 - Request For Documentary Evidence

The Examiner makes the allegation that "the cellular phone performs functions of a personal digital assistant". While it may be true that as of today, December 11, 2006, cellular phones that include personal digital assistants may exist, such present-day knowledge does not constitute prior art in view of the application's filing date and thus cannot be used to maintain a prior art rejection.

Applicant respectfully challenges the above unsupported assertion and respectfully submits that at least *in the context* of the other recited elements of independent claim 12, the above-recited elements is not obvious or well known.

M.P.E.P. § 2144.03(E) states that "[i]t is never appropriate to rely solely on common knowledge in the art without evidentiary support in the record as the principal evidence upon which a rejection was based."

Accordingly, in order to maintain the rejection, Applicant respectfully requests that the Examiner produce references in support of the Examiner's contention or, if the Examiner is relying upon personal knowledge to support the finding of what is known in the art, then the Examiner must provide an affidavit or declaration setting forth specific factual statements and explanations to support the finding. See, e.g., M.P.E.P. § 2144.03 and 37 C.F.R. § 1.104(d)(2).

B. Improper Use of In re Schreiber

Applicant also objects to the use of In re Schreiber as a basis for the rejection of claim 16. In the Office Action, the Examiner states that "the recitation of a new intended use for an old product does not make a claim to that old product patentable" (citing In re Schreiber).

Applicant respectfully submit that claim 16 does not recite any functional language. Instead, claim 16 recites structural language. Claim 16 recites that "the electronic device is a cellular phone". There is no functional language to justify using In re Schreiber.

Applicant respectfully requests that the Examiner provide Applicant with an analysis of the facts and holdings of In re Schreiber that make In re Schreiber applicable to the present claim (i.e., claim 16).

For at least the above reasons, it is respectfully submitted that the obviousness rejection be withdrawn with respect to claim 16.

V. CLAIMS 9, 10, 24 AND 25

A. Claim 9

Claim 9 recites "receiving the DC offset estimate from an initial offset calculator".

With respect to claim 9, although admitting the teaching deficiencies of Dutkiewicz, the Examiner nevertheless concludes, without any documentary support, that "one of ordinary skill in the art would have recognized that DC tracking stage 23 provides initial DC offset estimate to DC offset removal 22".

Applicant respectfully challenges the above unsupported assertions and respectfully

In Reply to Office Action of July 10, 2006

submits that at least *in the context* of the other recited elements of independent claim 1 and the other recited elements of intervening claims 7 and 8, the above-recited elements are not obvious or well known. M.P.E.P. § 2144.03(E) states that “[i]t is never appropriate to rely solely on common knowledge in the art without evidentiary support in the record as the principal evidence upon which a rejection was based.”

Accordingly, in order to maintain the rejection, Applicant respectfully requests that the Examiner produce references in support of the Examiner’s contention or, if the Examiner is relying upon personal knowledge to support the finding of what is known in the art, then the Examiner must provide an affidavit or declaration setting forth specific factual statements and explanations to support the finding. See, e.g., M.P.E.P. § 2144.03 and 37 C.F.R. § 1.104(d)(2).

For at least the above reasons, it is respectfully requested that the rejection be withdrawn with respect to claim 9.

B. Claim 10

Claim 10 depends from claim 9. So without ever offering documentary support, the Examiner has alleged that the elements of claim 10 are obvious and that the elements of claim 9, from which claim 10 depends are also obvious -- all without having done a search for the recited elements or ever having found a document in support of the rejection!

Claim 10 recites “calculating the DC offset estimate using a pilot signal”. The Examiner admits that the cited documents are deficient in their teachings with respect to using a pilot signal in calculating a DC offset estimate. In fact, the Examiner admits that the cited documents do not teach a pilot signal at all. Nevertheless, with any documentary support, the Examiner strings together a number of allegations, one on top of another, and on top of such precariously unsupported logic states it would have been obviousness to one of ordinary skill in the art. Just because a pilot signal may or may not be in a preamble as suggested by the Examiner does not necessarily mean one of ordinary skill in the art would use the pilot signal for calculating a DC offset estimate.

Is even the combination of claims 9 and 10 so obvious? Claims 9 and 10 recite receiving

a DC offset estimate from an initial offset calculator in which the DC offset estimate was calculated using a pilot signal. Applicant respectfully submits that the Examiner has proclaimed an extraordinary amount of subject matter (including interrelationships between elements) as obvious without ever providing any documentary evidence.

Applicant respectfully challenges the above unsupported assertions and leaps in logic and respectfully submits that at least *in the context* of the other recited elements of independent claim 1 and the other recited elements of intervening claims 7 and 8 and 9, the above-recited elements are not obvious or well known. M.P.E.P. § 2144.03(E) states that “[i]t is never appropriate to rely solely on common knowledge in the art without evidentiary support in the record as the principal evidence upon which a rejection was based.”

Accordingly, in order to maintain the rejection, Applicant respectfully requests that the Examiner produce references in support of the Examiner’s contention or, if the Examiner is relying upon personal knowledge to support the finding of what is known in the art, then the Examiner must provide an affidavit or declaration setting forth specific factual statements and explanations to support the finding. See, e.g., M.P.E.P. § 2144.03 and 37 C.F.R. § 1.104(d)(2).

For at least the above reasons, it is respectfully requested that the rejection be withdrawn with respect to claim 10.

C. Claims 24 and 25

Claims 24 and 25 were rejected under the Examiner’s ubiquitous “similar scope” rejection. Claims 24 and 25 recite similar elements as set forth in claims 9 and 10, although claims 24 and 25 belong to a different independent claim set. Accordingly, the same or similar arguments, if applicable, made above with respect to claims 9 and 10 are also made with respect to claims 24 and 25, respectively.

Accordingly, in order to maintain the rejection, Applicant respectfully requests that the Examiner produce references in support of the Examiner’s contention or, if the Examiner is relying upon personal knowledge to support the finding of what is known in the art, then the Examiner must provide an affidavit or declaration setting forth specific factual statements and

explanations to support the finding. See, e.g., M.P.E.P. § 2144.03 and 37 C.F.R. § 1.104(d)(2).

For at least the above reasons, it is respectfully requested that the rejection be withdrawn with respect to claims 24 and 25.

VI. CLAIMS 12 AND 14-18

Claims 12 and 14-18 stand rejected under Chen in view of Dutkiewicz. Applicant respectfully traverses the rejection as set forth below.

Claim 12 recites “a DC offset compensator; a plurality of sample accumulators, each of the plurality of sample accumulators being coupled with the DC offset compensator; and a maximum identifier coupled with each of the plurality of sample accumulators; wherein the maximum identifier is configured to identify the maximum output of the plurality of sample accumulators and cause an output to be generated according to the identified maximum output”.

It is alleged that Chen teaches all these elements except a DC offset compensator. Applicant respectfully disagrees and the Examiner must agree since the Examiner made the bold assertion, without any evidentiary support, that “the comparison module performs an equivalent function of a maximum identifier”.

Applicant respectfully challenges such an assumption by the Examiner and requests that the Examiner provide evidentiary support in the form of documentary support that “the comparison module performs an equivalent function of a maximum identifier”.

A. M.P.E.P. § 2145(X)(D)(1) - Prohibition Against Teaching Away From Claimed Invention

In fact, as the Examiner will freely admit, Chen does not teach a maximum identifier, but appears to teach the opposite! Whereas claim 12 recites a “maximum identifier”, Chen teaches a “comparison module” that “[compares] the sums of phase differences outputted from the accumulators. The optimal sampling point corresponds to an accumulator having the smallest

sum of the phase differences.” Chen at col. 2, lines 36-39. So instead of a “maximum identifier”, Chen teaches an accumulator having the smallest sum of the phase differences.

M.P.E.P. § 2145(X)(D)(1) states that “[a] prior art reference that ‘teaches away’ from the claimed invention is a significant factor to be considered in determining obviousness”. By teaching an accumulator having the smallest sum of the phase difference, Chen teaches away from “a maximum identifier”.

Dutkiewicz does not make up for the teaching deficiencies of Chen.

For at least the above reasons, it is respectfully submitted that an obviousness rejection based on the teachings of Chen cannot be maintained.

It is respectfully requested that the rejection based on the modification of Chen be withdrawn with respect to claims 12 and 14-18.

**B. M.P.E.P. § 2143.01(VI) - Prohibition Against
Changing Operation of Prior Art Being Modified**

In addition, in order to modify the teachings of Chen according to the elements as set forth in claim 12, the operation of Chen would have to be substantially changed. For example, the Examiner would have to completely remove and replace the difference generating circuit 51. *Applicant respectfully submits that the difference generating circuit 51 is the inventive concept of Chen and cannot be modified without changing the core operation of Chen.* See, for example, a partial description of the difference generating circuit in a first embodiment at Chen from col. 3, line 51 to col. 5, line 7. Applicant respectfully submits the difference generating circuit is the inventive concept of Chen and is key to its core operation.

M.P.E.P. § 2143.01(VI) states that “[i]f the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the reference are not sufficient to render the claims *prima facie* obvious”.

Applicant respectfully submit that, since the proposed modification of Chen in view of

In Reply to Office Action of July 10, 2006

the elements as set forth in claim 12 would change the principle of operation of Chen by modifying or replacing the difference generating circuit 51 as well as modifying other components and operations, M.P.E.P. § 2143.01(VI) concludes that the teachings of Chen do not render *prima facie* obvious the subject matter as set forth in claim 12.

It is respectfully requested that the rejection based on the modification of Chen be withdrawn with respect to claims 12 and 14-18.

VII. OBVIOUSNESS REJECTION BASED ON ANDREN AND DUTKIEWICZ

Applicant respectfully submit that Andren and Dutkiewicz teach away from other and cannot properly be combined.

Andren teaches fast acquisition bit timing loop in a spread spectrum receiver. According to Andren, the baseband signal is spread across the frequency band using a spectrum spreading pseudo noise. See, e.g., Andren at col. 1, lines 32-35.

The gist of the invention of Dutkiewicz is that, referring to FIG. 3, that the DC tracking 23 is modified either by the TRACK or ACQUIRE. “The track mode is a narrow bandwidth mode in which the DC off-set loop bandwidth is relatively small, reducing the effects on noise on the tracking sub-system and allowing the sub-system to adapt relatively slowly.” Dutkiewicz at col. 3, lines 52-57.

Thus, one of ordinary skill in the art would never look to Dutkiewicz because its solution of using a narrow bandwidth mode (i.e., track mode) of the DC tracking 23 would have deleterious effects on the spread spectrum baseband signal (e.g., a wideband baseband signal) of Andren. Thus, the invention of Dutkiewicz would corrupt the very signal that one of ordinary skill in the art is trying to clean.

For at least the above reasons, it is respectfully submitted that an obviousness rejection based on Andren in view of Dutkiewicz cannot be maintained because one of ordinary skill in the art would not look to combine the solutions of Dutkiewicz with the teachings of Andren since

the solutions of Dutkiewicz would corrupts the spread spectrum baseband signal of Andren.

It is respectfully requested that the obviousness rejections based, at least in part, on the combination of Andren and Dutkiewicz be withdrawn.

VIII. OBVIOUSNESS REJECTION BASED ON DUTKIEWICZ AND GIALLORENZI

Applicant respectfully submit that Dutkiewicz and Giallorenzi teach away from other and cannot properly be combined.

The Examiner has previously attempted to base an obviousness rejection on the combination of at least Dutkiewicz and Giallorenzi.

Applicant has previously and persuasively (as deemed by the Examiner) argued that Dutkiewicz and Giallorenzi teach away from each other and demonstrated that Dutkiewicz and Giallorenzi were improperly combined.

Applicant respectfully draws the attention of the Examiner to the Response of October 3, 2005.

Applicant also respectfully draws the attention of the Examiner to the Office Action of December 27, 2005 in which the Examiner stated that “Applicant’s arguments, see pages 9-17 of the Amendment, filed on 10/03/2005, with respect to the rejection(s) of claims(s) 1-3 and 5-28 under 35 U.S.C. 103(a) **have been fully considered and are persuasive. Therefore, the rejection has been withdrawn.**” Office Action of December 27, 2005 at page 2 (emphasis added).

The result of Applicant’s arguments (deemed persuasive by the Examiner) was that, in the subsequent office action, the Examiner withdrew the combination of Dutkiewicz and Giallorenzi.

U.S. Application No. 10/035,567, Attorney Docket No. 15983US01, filed October 22, 2001
Response dated December 11, 2006
In Reply to Office Action of July 10, 2006

Since the Examiner has previously withdrawn the combination of Dutkiewicz and Giallorenzi in view of Applicant's persuasive arguments relating to Dutkiewicz and Giallorenzi teaching away from each other and the improper combination of Dutkiewicz and Giallorenzi, Applicant respectfully requests that the combination of Dutkiewicz and Giallorenzi be withdrawn again as the basis for an obviousness rejection.

For at least the above reasons, it is respectfully requested that the obviousness rejections based, at least in part, on the combination of Dutkiewicz and Giallorenzi be withdrawn.

U.S. Application No. 10/035,567, Attorney Docket No. 15983US01, filed October 22, 2001
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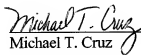
IX. CONCLUSION

In view of at least the foregoing, it is respectfully submitted that the pending claims 1-28 are in condition for allowance. Should anything remain in order to place the present application in condition for allowance, the Examiner is kindly invited to contact the undersigned at the below-listed telephone number.

The Commissioner is hereby authorized to charge any additional fees or to charge any fee deficiencies or to credit any overpayments to the deposit account of McAndrews, Held & Malloy, Account No. 13-0017.

Date: December 11, 2006

Respectfully submitted,


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